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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/538,526 | 12/12/2005 | Wilhelm Fahrbach | 10191/4189 | 3666 |
| 26646 | 7590 | 08/08/2006 | EXAMINER | |
| KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004 | | | WHITE, DYLAN C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2819 | |

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-----------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/538,526 | FAHRBACH ET AL. | |
| | Examiner | Art Unit | |
| | Dylan White | 2819 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

The disclosure is objected to because of the following informalities: The first paragraph of the specification does not disclose the reference to the Foreign Priority application. The foreign office, application number, and granted filing date should be included. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The balancing element (109) in the present application is not enabling because the disclosure fails to describe what the balancing element comprises and how it functions with the two-wire termination circuit of Fig. 1. A balancing element is not well known in the art. The inventor has not provided enough direction for one of ordinary

skill in the art to understand how to make or use the claimed element, and does not provide any examples in the disclosure. One of ordinary skill would not fully understand the present invention without undue experimentation (MPEP 2164.01(a)) *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993).

Additionally for examination purposes the balancing element of claims 9 and 10 has not been given any patentable weight.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 7 and 8, are rejected under 35 U.S.C. 102(e) as being anticipated by Yang (US 6,836,144).

Regarding claim 7, Yang discloses a first termination resistor (R1 @ Fig. 1) and a second termination resistor (R2 @ Fig. 1) provided between the two wires (V+ & V-) of the two-wire line, where the first and second terminating resistors (col. 3, lines 2-3) are connected in series (Fig. 1); and at least one switching arrangement (T1, T2) provided between the first and second terminating resistors (Fig. 1) where the at least one

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switching arrangement is configured to selectively connect to at least one of the first and second terminating resistors (col. 3, lines 26-28).

Regarding claim 8, Yang discloses where the switching logic for triggering the at least one switching arrangement as a function of an input signal (V_{COM} @ Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,836,144) in view of Funaba (US 6,853,213).

Regarding claim 11, Yang discloses that of claim 8, but fails to teach the switching arrangement input signal generated by an arithmetic function block.

Funaba discloses in Input/Output circuit, Reference-Voltage Generator, and Semiconductor IC, where input to switching and termination circuit (15 @ Fig. 2) is generated by arithmetic control circuitry (20), therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the termination circuitry disclosed by Yang and the arithmetic control taught by Funaba for accelerated switching and accurate signal termination of a input/output circuit.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,836,144) in view of Haase et al. (US 6,922,073).

Regarding claim 12, Yang discloses the input output circuit of claim 7, but fails to disclose the differential signals as lines of a CAN bus.

Haase discloses in Circuit Configuration for Signal Balancing in Antiphase Bus Drivers, differential CAN bus signals (CANH & CANL @ Fig. 1), therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the termination circuitry disclosed by Yang with the CAN bus taught by Haase for its communication speed increase and increased signal integrity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dylan White whose telephone number is (571) 272-1406. The examiner can normally be reached on m-f 7:30- 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dcw


REXFORD BARNIE
SUPERVISORY PATENT EXAMINER